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Intellectual Property - Patent Law - Interferences

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Recent Decisions

INTELLECTUAL PROPERTY—PATENT LAW—INTERFERENCES—The Court of Appeals for the Federal Circuit held that the quantum of proof for priority is clear and convincing evidence, and that corroboration of inventor's testimony will be evaluated by the "rule of reason."

Price v. Symsek, 988 F.2d 1187 (Fed. Cir. 1993).

Richard C. Price ("Price") appealed a decision of the United States Patent and Trademark Office Board of Patent Appeals and Interferences ("Board") that awarded the patent in question in Patent Interference Count No. 102,101 to Dale R. Symsek ("Symsek") and Nancy P. Regelin ("Regelin").¹ Symsek and Regelin, engineers for the American Bridge Division of the United States Steel Corporation, were issued United States Patent No. 4,628,869 ("the '869 patent") for a "Variable Temperature Waste Heat Recovery System," which was subsequently assigned to U. S. Steel.² Nearly one year after the patent was issued, Price filed United States Patent Application Serial No. 07/131,859 which copied claims from the '869 patent and provoked the interference.³ The invention in question is an improved process for recovering and using heat that is generated in a process heater and normally dissipated without being redirected for useful application, thus improving the efficiency of the system as a whole.⁴

1. *Price v. Symsek*, 988 F.2d 1187, 1189 (Fed. Cir. 1993).

2. *Price*, 988 F.2d at 1189.

3. *Id.* An interference is an action declared whenever a patent application would interfere with another pending application or with a granted patent. 35 U.S.C. § 135 (1988). The Board of Patent Appeals and Interferences determines the question of priority and may determine patentability. *Id.* A claim that interferes with an issued patent must be made within one year after the date on which the patent was granted. *Id.*

4. *Price*, 988 F.2d at 1189–90. In the usual closed-loop heat recovery system, a thermal fluid becomes heated in a first heat exchanger by exhaust gas as the gas exits a process

Price submitted affidavits and depositions intending to show that he conceived this process before Symsek and that Symsek derived the invention from him.⁵ In the alternative, Price sought to prove that because he conceived the system prior to conception by Symsek, and was reasonably diligent in reducing the invention to practice, he was thus entitled to an award of priority of invention.⁶ The Board required Price to prove beyond a reasonable doubt all of the elements necessary to establish either priority or derivation,

heater. *Id.* at 1189. This heated fluid then leaves the first heat exchanger and travels to a second heat exchanger, where it transfers some of its heat to combustion gases before these gases enter the process heater, thus increasing the efficiency of the burners. *Id.* If there is any variance in the temperature of the exhaust gases, for example in a variable cycle unit, then the temperature of the thermal fluid will vary, the heat transferred to the incoming combustion gas varies, and the process loses efficiency. *Id.* The invention in the count at issue places a large-volume reservoir on the downstream side of the first exchanger and on the upstream side of the second heat exchanger. *Id.* The thermal fluid then passes from the first heat exchanger into this reservoir, which contains a large volume of equilibrium (or nearly so) temperature fluid, and then fluid from this reservoir travels to the second heat exchanger to preheat the combustion gases. *Id.* The effect of this reservoir (which has a larger volume than the rest of the closed system) is to send a fairly constant temperature fluid to the second heat exchanger, so the amount of heat transferred to preheat the combustion gases remains relatively constant. *Id.* This tends to improve the efficiency of the process. *Id.* at 1190.

5. *Id.* Prior conception is an important concept because a valid patent cannot be granted to an applicant if the invention had been previously conceived by another, if the other was diligent in reducing the invention to practice. 35 U.S.C. §102(g) (1988). Conception has been defined as "the complete performance of the mental part of the inventive act." *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985) (affirming award of priority to the junior party based on the inability of the senior party to corroborate conception). All that remains after conception is construction, not invention. *Coleman*, 754 F.2d at 359. The formation in the inventor's mind of the idea of a complete and operative invention is conception within the patent law. *Id.* Derivation is important because a valid patent cannot be granted to one who did not invent the subject matter sought to be patented (e.g., a stolen idea). 35 U.S.C. §102(f) (1988).

6. Reduction to practice is another important concept because although one may have been the first to conceive the invention, if he is not diligent in reducing the invention to practice, the first inventor's priority may be defeated. 35 U.S.C. §102(g) (1988). It is a long-standing rule that a delay of great length in activity on the subject matter of the invention may bar the first inventor from using an early reduction to practice as a defense in a contest of his priority. *Paulik v. Rizkalla*, 760 F.2d 1270 (Fed. Cir. 1985) (holding that while too long of a delay in reduction to practice may bar the first inventor from priority, if the first inventor resumes work on the invention prior to the initiation of work by the second inventor, the first inventor may rely on the resumed work for priority). Reduction to practice is a term of art that entails successful testing of the invention. *Wolter v. Belicka*, 409 F.2d 255, 262-63 (C.C.P.A. 1969) (Rich, J., dissenting) (reviewing the definition of reduction to practice where the majority held that the junior party did not successfully reduce the invention to practice). Reduction to practice occurs when the invention's "workability" is shown. *Wolter*, 409 F.2d at 263. "Workability" indicates that a functional, tangible construction of the invention has been completed. *Id.* It is not necessary that the construction operate flawlessly, just that it will perform its intended use beyond probability of failure. *Id.*

and awarded the patent to Symsek when Price failed to meet this standard of proof.⁷

Price appealed this decision, asserting that the Board committed legal error by requiring him to prove prior conception, communication, and diligent reduction to practice by the criminal standard of beyond a reasonable doubt.⁸ He also argued that the Board erred in refusing to consider documentary evidence to show priority, even though the date of existence of the document was corroborated by a witness.⁹

The Court of Appeals for the Federal Circuit identified that the issue of the quantum of proof necessary to show priority in an interference with an issued patent was a question of first impression in the Federal Circuit.¹⁰ The court stated that the United States Supreme Court has characterized the three standards of proof generally recognized as "preponderance of the evidence" as used in most civil cases, "clear and convincing evidence" reserved to those civil cases in which it is necessary to preserve particularly important interests, and "beyond a reasonable doubt" as applicable to criminal cases.¹¹ This court recognized that the Supreme Court has

7. *Price*, 988 F.2d at 1190. The elements of a priority action include a showing that the challenging party was the first to conceive and to reduce the invention to practice within a reasonable time after conception. *Lutzker v. Plet*, 843 F.2d 1364 (Fed. Cir. 1988) (holding that the junior party was not entitled to prevail in a priority action because he had suppressed or concealed the invention within the meaning of 35 U.S.C. §102(g) (1988)). In a derivation proceeding, the party alleging derivation must show prior, complete conception of the invention and communication of this conception to the deriving party. *Hedgewick v. Akers*, 497 F.2d 905, 908 (C.C.P.A. 1974) (holding that the junior party did not meet the burden of proving derivation). The communication must be such as would allow one skilled in the art to fabricate and operate the invention. *Hedgewick*, 497 F.2d at 908.

8. *Price*, 988 F.2d at 1190-91.

9. *Id.* at 1190.

10. *Id.* at 1191. The Court of Appeals for the Federal Circuit is a thirteenth court of appeals created by the Federal Courts Improvement Act of 1982. PAUL GOLDSTEIN, *COPYRIGHT, PATENT, TRADEMARK AND RELATED STATE DOCTRINES* 199 (rev. 3d ed. 1993). It is an Article III court and has twelve judges appointed by the President with the advice and consent of the Senate. *Id.* It combines the former Court of Customs and Patent Appeals and the Court of Claims. *Id.* In its first session, it adopted the decisions of those courts as precedents of its own. *Id.* As opposed to the other courts of appeals, this court's jurisdiction is defined by subject matter, instead of geography. *Id.* It was created to eradicate the wide diversity of standards applied to patent cases by the circuits. *Id.* The Federal Circuit has the patent jurisdiction formerly a part of the twelve circuit courts of appeals. *Id.* at 365. This has eliminated forum shopping and conflict between the circuits and has strengthened the grant of patents by giving new force to the presumption of validity and bolstering the procedural and remedial relief available to owners of patents. *Id.* One study has shown that between 1945 and 1957, the Fourth and Fifth Circuits held about 40% of the patents that came before the courts valid, while the Second Circuit held only 4.8% valid. *Id.* at 377.

11. *Price*, 988 F.2d at 1191 (citing *California ex rel. Cooper v. Mitchell Bros.*' Santa

never required a party in a civil suit to meet the burden of "beyond a reasonable doubt."¹² The court reiterated that the "clear and convincing evidence" standard requires a more demanding burden of proof than does the "preponderance of the evidence" standard, but imposes a less onerous burden than the "beyond a reasonable doubt" standard.¹³

The court invoked the "social disutility" analysis introduced by Justice Harlan in *In re Winship*,¹⁴ in which the standard of proof used reflects a fundamental evaluation of the social costs, or "disutility," of inaccurate factual determinations.¹⁵ The court noted that the Supreme Court has habitually applied this "social disutility" analysis when a question arises regarding the appropriate burden of proof.¹⁶ The court considered that earlier decisions in which the

Ana Theater, 454 U.S. 90, 93 (1981) (holding that the United States Constitution does not require the imposition of the criminal standard of beyond reasonable doubt to a civil obscenity case)). See also *Addington v. Texas*, 441 U.S. 418, 423-24 (1979) (finding that the standard for commitment because of a mental illness was more than a mere preponderance, but less than beyond a reasonable doubt, and defining the three standards of proof).

12. *Price*, 988 F.2d at 1191. But see *Ward & Gow v. Krinsky*, 259 U.S. 503, 522 (1922) (applying the beyond a reasonable doubt standard in a workman's compensation case); *Moore v. Crawford*, 130 U.S. 122, 134 (1889) (applying the beyond a reasonable doubt standard with respect to an oral agreement in a property conveyance suit); cf. *Fidelity Mut. Life Ass'n. v. Mottler*, 185 U.S. 308, 317 (1902) (stating that if a criminal act is asserted, the rule of reasonable doubt is applicable to establish that act).

13. *Price*, 988 F.2d at 1191.

14. 397 U.S. 358, 370 (1970) (Harlan, J., concurring) (holding that the beyond reasonable doubt standard applied to criminal law has support in the United States Constitution).

15. *In re Winship*, 397 U.S. at 370. This social disutility analysis recognizes that (1) factfinders rarely attain exact knowledge of the event—achievement of a belief of what happened is typically the best that can be realized, and (2) sometimes the factfinder will not reach the correct factual conclusion, no matter how assiduous the attempt to arrive at the truth. *Id.* In a criminal suit, there are two possible outcomes of an erroneous determination of the facts—either a guilty man will be set free or an innocent man will be found guilty. *Id.* at 370-71. If the burden of proof were merely a preponderance of the evidence, then there would be a far smaller risk of freeing guilty parties, but the likelihood of punishing an innocent person would be great. *Id.* at 371. The standard of proof to be used affects the frequency of each of these types of inaccurate consequences; therefore, the choice of standard to be applied should reflect an evaluation of the relative social disutility of each outcome. *Id.* When the standards of proof are viewed in this light, the reasons for the different standards of proof between a criminal and a civil case become clear. *Id.* In a civil suit for damages, it is no more serious for an error to go in favor of the plaintiff than for an error to go in favor of the defendant. *Id.* Therefore, the preponderance of the evidence standard seems particularly appropriate for civil cases. *Id.* at 371-72. Society, however, does not view the disutility of convicting an innocent party as the same as the disutility of the acquittal of a guilty party. *Id.* at 372.

16. *Price*, 988 F.2d at 1193. See, e.g., *Santosky v. Kramer*, 455 U.S. 745, 754-55 (1982) (applying the disutility analysis to determine the minimum burden of proof necessary for termination of parental rights); *California ex rel. Cooper v. Mitchell Bros.* Santa Ana Theater, 454 U.S. 90, 92-93 (1981) (employing the disutility analysis to aid in the

standard of proof was recited as "beyond a reasonable doubt" were not made as a result of a reasoned analysis that the highest degree of proof was necessary to protect a valued societal interest.¹⁷ The court decided that the evidentiary standard of clear and convincing evidence suffices for the patent interest at stake, for which the opponent must establish priority by highly persuasive evidence that leads to a "thorough conviction in one's mind of the truth of the challenger's position."¹⁸ In an interference proceeding, the court stated, the societal interest to protect a patent that has already been issued is derived from the presumption of the validity of a patent, and this interest warrants a higher standard than a preponderance of the evidence.¹⁹ Thus, the court concluded, the correct standard to be applied is the clear and convincing evidence standard.²⁰

The court noted, however, that although Price should not have been required to meet the standard of beyond a reasonable doubt, it is well settled in case law that an inventor's testimony regarding priority or derivation of the invention, standing alone, is not sufficient to satisfy the standard of clear and convincing evidence.²¹ The challenger's oral testimony has historically been regarded with skepticism,²² and this testimony requires the support of cor-

determination of the proper standard of proof for a civil obscenity case); *Addington v. Texas*, 441 U.S. 418, 427 (1979) (applying the disutility analysis in determining the proper standard of proof for commitment due to mental illness).

17. *Price*, 988 F.2d at 1193. See, e.g., *Horwath v. Lee*, 564 F.2d 948, 949 n.2 (C.C.P.A. 1977) (applying the beyond reasonable doubt standard when an interference is filed after the issuance of a patent); *Silvestri v. Grant*, 496 F.2d 593, 596 n.5 (C.C.P.A. 1974), cert. denied, 420 U.S. 928 (1975) (requiring the challenging party to prove beyond a reasonable doubt that it recognized that it had developed a new form of ampicillin); *Wolter v. Belicka*, 409 F.2d 255, 256 n.1 (C.C.P.A. 1969) (holding that the junior party must demonstrate reduction to practice beyond a reasonable doubt); *Walker v. Altorfer*, 111 F.2d 164, 165 (C.C.P.A. 1940) (holding that the junior party must prove priority beyond a reasonable doubt).

18. *Price*, 988 F.2d at 1193.

19. *Id.*

20. *Id.* at 1194.

21. *Id.*; See, e.g., *Reese v. Hurst*, 661 F.2d 1222, 1225 (C.C.P.A. 1981) (holding that the junior party must provide independent corroboration of reduction to practice); *Mergenthaler v. Scudder*, 11 App. D.C. 264 (D.C. Cir. 1897) (holding that witnesses who derive their knowledge of the invention from the inventor, absent actually witnessing the invention, do not provide adequate corroboration of reduction to practice of the invention).

22. See, e.g., *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 60 (1923) (recognizing the ease with which honest witnesses can convince themselves that they had a conception of the basis of a valuable patent before the inventor to whom the patent is granted, and that this phenomenon is well-recognized in this branch of law, thus necessitating a requirement of clear and satisfactory evidence of such conception); *Washburn & Moen Mfg. Co. v. Beat 'Em All Barbed-Wire Co.*, 143 U.S. 275, 285 (1892) (discussing how with

roborating evidence.²³ Without this corroboration, the court held, an alleged inventor's testimony does not satisfy the "clear and convincing evidence" standard necessary to overcome the presumption of validity of an issued patent.²⁴ Consequently, the court observed, the outcome of a case often depends on which inventor has the burden of proof.²⁵

The court found that the Board in this case correctly put the burden on Price, the junior party.²⁶ However, the court considered that the Board's application of the "beyond a reasonable doubt" standard resulted in an untenable requirement of corroboration.²⁷

The Board found that the date of conception of the invention by Symsek was early February 1983.²⁸ Price did not contest this date, but offered evidence to prove his conception of the invention before that date.²⁹ The court held that in order to prove priority, conception by a challenging inventor cannot be proven solely by his uncorroborated testimony or mere allegation; disclosure to others or depiction of the invention in some clearly tangible form, such as drawings or models, with an adequate showing of identity in point of time, is necessary for corroboration.³⁰ The court recognized that if this were not the case, mere allegation of priority would virtually prevent the adverse party from rebutting the allegation, thus offering great temptation of perjury to establish priority.³¹ To aid the inquiry, a "rule of reason" analysis was applied by the court to determine the corroboration of the inventor's prior conception testimony.³² This entails an evaluation of all germane

every important patent, like the cotton gin and barbed wire, there have been those who "imagined" that they had invented the subject matter before the patentee, and how this use of the imagination has thrown discredit on uncorroborated testimony by an inventor).

23. *Price*, 988 F.2d at 1194. See *Coleman v. Dines*, 754 F.2d 353, 360 (Fed. Cir. 1985) (affirming award of priority to the junior party based on the inability of the senior party to corroborate conception).

24. *Price*, 988 F.2d at 1194.

25. *Id.*

26. *Id.* Symsek was entitled to the presumption of validity of the patent. *Id.* at 1193.

27. *Id.* at 1194.

28. *Id.*

29. *Price*, 988 F.2d at 1195. This evidence consisted of, inter alia, affidavits and testimony from the Secretary of Price Industries and from two American Bridge engineers who were involved in the project. *Id.* at 1195-96 & n.4. Evidence was also introduced that was intended to show that Symsek and Regelin were neophytes in the field and could not have invented the system without the disclosure by Price. *Id.* at 1196 n.4.

30. *Id.* at 1194-95 (citing *Mergenthaler v. Scudder*, 11 App. D.C. 264, 278 (D.C. Cir. 1897)).

31. *Price*, 988 F.2d at 1194.

32. *Id.* at 1195. An "equitable rule of reason" is used to permit courts to avoid a rigid

evidence by the court so that the credibility of the prior conception evidence can be reliably determined.³³ The court decided that the Board imposed the corroboration requirement to an unreasonable extent.³⁴

Price presented several exhibits to show prior conception in support of his affidavit.³⁵ An affidavit from the Corporate Secretary of Price Industries ("Secretary") was submitted that corroborated the date of a drawing made of the invention as before the conception date of Symsek.³⁶ The Board held that this affidavit was not sufficient corroboration because the Secretary did "not attribute the drawing to the applicant Price or indicate that she had any understanding of its content or that anyone explained the significance of the drawing to her."³⁷ The court held that the Board erred in requiring a drawing to have corroborating evidence as to its content.³⁸ The court said that corroboration is not necessary to show the content of a drawing; corroboration is merely necessary to support the inventor's testimony.³⁹ If the Secretary's affidavit were believed, remarked the court, it would support the contention that

application of a statute when it would repress the very creativity the law was designed to further. *Stewart v. Abend*, 495 U.S. 207, 236 (1990) (acknowledging the copyright law fair use doctrine as an example of rule of reason). The rule of reason was developed over the years to ease the burden of corroboration; it is usually applied with respect to actual reduction to practice. *Coleman v. Dines*, 754 F.2d 353, 360 (Fed. Cir. 1985) (employing the rule of reason to determine if sufficient corroboration for conception by the senior party exists). The rule exhorts a rational evaluation of all pertinent evidence to determine the credibility of the inventor's testimony. *Coleman*, 754 F.2d at 360. This rule, however, does not eliminate the need for independent corroboration. *Id.*

33. *Price*, 988 F.2d at 1195. See *Coleman*, 754 F.2d at 360. Factors that are relevant to the inventor's credibility are:

(1) delay between the event and the trial, (2) interest of corroborating witnesses, (3) contradiction or impeachment, (4) corroboration, (5) the corroborating witnesses' familiarity with details of alleged prior structure, (6) improbability of prior use considering the state of the art, (7) impact of the invention on the industry, and (8) relationship between witness and alleged prior user.

In re Reuter, 670 F.2d 1015, 1021 n.9 (C.C.P.A. 1981) (holding a patent invalid because of obviousness, but evaluating the credibility of a challenging inventor's oral testimony).

34. *Price*, 988 F.2d at 1195.

35. *Id.* One such exhibit was a drawing purportedly made by Price before the date of conception by Symsek that illustrated the invention and was part of a proposal package that was prepared by Price and submitted to Bethlehem Steel for consideration as part of a blast furnace system. *Id.*

36. *Id.* at 1195.

37. *Id.*

38. *Id.* Evidence of what the drawing would signify to one who is skilled in the art would be relevant to evaluate the drawing; however, the content itself of the drawing needs no corroboration. *Id.* at 1195-96.

39. *Price*, 988 F.2d at 1195.

the drawing made by Price, depicting the invention in question, was drafted before the conception date of Symsek.⁴⁰

The court went on to express that even if none of the evidence presented would, by itself, be sufficient to show "clear and convincing evidence" of the derivation or prior conception, it would be sufficient if the picture painted by the collective evidence taken as a whole was such that the Board would have "an abiding conviction" that the prior conception was "highly probable."⁴¹ The court vacated the Board's decision and remanded with instruction to evaluate all of the evidence as a whole under the clear and convincing evidence standard.⁴²

An issued patent carries with it a presumption of validity.⁴³ It has been said that in an infringement suit, the presumption of this validity is so strong that the burden of proof is on the party challenging the patent on the basis of prior invention and "every reasonable doubt should be resolved against him."⁴⁴ The context in cases that use this and like phrases suggests that the courts were not defining a precise standard of proof, but were "offering counsel and suggestion to guide the course of judgment."⁴⁵ The one theme common to the variety of expressions of the burden of proof placed on the assailant of the validity of a patent is that it is that party bearing the onerous burden of persuasion, and that party will fail if its evidence does not amount to more than a preponderance.⁴⁶

40. *Id.* at 1196. The Secretary testified that retention of such drawings was a regular business practice, and she remembered seeing this specific drawing almost a year before Symsek's conception date of February 1983. *Id.* The Board rejected her testimony for lack of sufficiency, not for lack of credibility. *Id.*

41. *Id.* See *Buildex, Inc. v. Kason Indus., Inc.*, 849 F.2d 1461, 1463 (Fed. Cir. 1988) (describing clear and convincing evidence in a patent infringement suit); *Colorado v. New Mexico*, 467 U.S. 310, 316 (1984) (holding that in an action alleging diversion of interstate water, the clear and convincing evidence standard should be used, instead of a mere preponderance, and defining that standard to mean that the proponent must place in the factfinder "an abiding conviction" of the high probability of the truth of the factual contentions).

42. *Price*, 988 F.2d at 1196.

43. *Radio Corp. of Am. v. Radio Eng'g Lab., Inc.*, 293 U.S. 1, 7 (1934).

44. *Cantrell v. Wallick*, 117 U.S. 689, 695-96 (1886) (holding that "every reasonable doubt should be resolved against" the infringing party attempting to prove prior use or want of novelty). See also *Coffin v. Ogden*, 85 U.S. 120 (1873) (holding that the burden of proof rests upon the defendant in an infringement case regarding a patent on door locks, and that "every reasonable doubt should be resolved against him"); *Washburn & Moen Mfg. Co. v. Beat 'Em All Barbed-Wire Co.*, 143 U.S. 275, 285 (1892) (citing *Coffin v. Ogden* as the source of the rule that every reasonable doubt should be resolved against the defendant in an infringement suit).

45. *Radio Corp. of Am.*, 293 U.S. at 8 (analyzing previous infringement cases in which one party sets up the defense of prior invention).

46. *Id.*

The Court of Customs and Patent Appeals, a predecessor of the Court of Appeals for the Federal Circuit, had on numerous occasions spoken of proof "beyond a reasonable doubt" in patent interference cases.⁴⁷ These decisions, however, were delivered before the Supreme Court clearly delineated the standards of proof, with its admonition against the use of "beyond a reasonable doubt" in other than a criminal case.⁴⁸ After the Supreme Court clearly defined the standards of proof,⁴⁹ the United States Court of Customs and Patent Appeals changed the elicitation of the standard of proof to indicate that the provoker of a patent interference must prove prior invention by clear and convincing evidence.⁵⁰ Also, the "clear and convincing evidence" standard has consistently been implemented by the Court of Appeals for the Federal Circuit regarding priority and derivation in infringement suits between private parties.⁵¹ There is no reason that the rule for the burden of proof in an infringement case should be different than that for an interference case.⁵²

*Marathon Oil Co. v. Firestone Tire and Rubber Co.*⁵³ held that if the interference is between two pending applications, as opposed to a pending application and an issued patent, as in the instant case, then the correct burden of proof would be a preponderance of the evidence.⁵⁴ This same case⁵⁵ held the proper standard of proof for an interference between an application and an issued patent to be clear and convincing evidence, based on the discussion of Justice Cardozo in *Radio Corp. of America v. Radio Engineering Lab-*

47. *Price*, 988 F.2d at 1192. See cases cited at note 17.

48. *Price*, 988 F.2d at 1192. See *Addington v. Texas*, 441 U.S. 418 (1979). See note 11.

49. *California ex rel. Cooper v. Mitchell Bros.' Santa Ana Theater*, 454 U.S. 90, 93 (1981) (generally defining the three standards of proof in a civil obscenity case). See note 11 and accompanying text.

50. *In re Reuter*, 670 F.2d 1015, 1021 n.9 (C.C.P.A. 1981).

51. *Price*, 988 F.2d at 1192. See, e.g., *Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc.*, 750 F.2d 1552, 1559-60 & 1562-64 (Fed. Cir. 1984) (holding that the proper burden in an infringement suit is clear and convincing evidence). Infringement of a patent occurs whenever one, without authority, makes, uses, or sells the patented invention within the United States within the term of the patent. 35 U.S.C. §271 (1988). An interference occurs when a patent application is filed that contains subject matter patented, or pending, within the previous year. 35 U.S.C. §135 (1988). See note 3.

52. *Langevin v. Nicolson*, 110 F.2d 687, 694 (C.C.P.A. 1940) (applying the evidence rules of prior infringement proceedings to an interference proceeding).

53. 205 U.S.P.Q. (BNA) 520 (N.D. Ohio 1979) (discussing how the timing of the interference, before or after the issuance of a patent, affects the applicable burden of proof).

54. *Marathon Oil*, 205 U.S.P.Q. at 526.

55. *Id.*

oratories.⁵⁶ The social disutility analysis of Justice Harlan in *In re Winship*,⁵⁷ would not yield the same result because there would be no presumption of validity for either party's claim.⁵⁸

The history of the standard of proof used in interference proceedings shows that there was little uniform application among courts (and sometimes even in the same court).⁵⁹ The Federal Courts Improvement Act of 1982, which created the United States Court of Appeals for the Federal Circuit as the federal appellate court for patent questions, clearly enabled the *Price* court to rectify the inconsistent application of the standard of proof by diverse courts that once decided patent cases.⁶⁰

*Mergenthaler v. Scudder*⁶¹ is often cited as establishing the proposition that an inventor's testimony may not, standing alone, be sufficient to establish priority.⁶² Since then, the courts have recog-

56. 293 U.S. 1 (1934). At the time of *Marathon* (1979), the Supreme Court had not yet clearly delineated the standards of proof in *California ex rel. Cooper v. Mitchell Bros.' Santa Ana Theater*, 454 U.S. 90 (1981), and specified that the beyond a reasonable doubt standard did not apply to civil cases. *Radio Corp. of Am.* recognized the confusion at that time (1934) in the standards of proof in similar cases and reasoned that the common core running through these types of cases was that more than a mere preponderance was necessary to refute the presumption of validity of an issued patent. *Radio Corp. of Am.*, 293 U.S. at 8.

57. 397 U.S. 358, 370 (1970) (Harlan, J. concurring). See note 15 and accompanying text.

58. *Radio Corp. of Am.*, 293 U.S. 1, established the principle that an issued patent carries the presumption of validity.

59. The standards of beyond a reasonable doubt, see, e.g., *Horwath v. Lee*, 564 F.2d 948, 949 n.2 (C.C.P.A. 1977) (applying the beyond reasonable doubt standard when an interference is filed after the issuance of a patent); *Silvestri v. Grant*, 496 F.2d 593, 596 n. 5 (C.C.P.A. 1974), cert. denied, 420 U.S. 928 (1975) (requiring the challenging party to prove beyond a reasonable doubt that it recognized that it had developed a new form of ampicillin); and clear and convincing evidence, see, e.g., *Amax Fly Ash Corp. v. United States*, 514 F.2d 1041 (Ct. of Cl. 1975) (requiring the government to prove derivation by clear and convincing evidence); *Acme Highway Products Corp. v. D. S. Brown Co.*, 431 F.2d 1074 (6th Cir. 1970), cert. denied, 401 U.S. 956 (1971) (requiring defendant in an infringement action to prove joint inventorship by clear and convincing evidence), have both been invoked in determining interferences.

60. See discussion at note 10 regarding the United States Court of Appeals for the Federal Circuit.

61. 11 App. D.C. 264 (D.C. Cir. 1897) (involving an interference regarding patent applications for a line-typing machine).

62. E.g., *Coleman v. Dines*, 754 F.2d 353 (Fed. Cir. 1985). If one could simply claim that he first conceived an invention, there could be many who would perjure themselves to chance convincing a jury that they were really the first to conceive, and, thus, are entitled to the benefits of the patent. *Mergenthaler*, 11 App. D.C. at 278. This assertion could essentially preclude the true first inventor from effective rebuttal. *Id.* The decision could devolve into one inventor's word against another—possibly attractive odds for some to claim priority.

nized that, in a decision of priority of invention, an inventor's testimony must be corroborated to provide sufficient evidence to find in the inventor's favor.⁶³ The basis for this rule is the public policy to prevent fraud in acquiring a patent.⁶⁴ In *Petrie v. DeSchweinitz*,⁶⁵ the court used the *Mergenthaler* reasoning to require corroboration in an interference case.⁶⁶ The court held that a witness' testimony relating to what the plaintiff (the inventor provoking the interference) said to him about what the plaintiff did or was going to do may be sufficient to show conception, but was not sufficient to show actual reduction to practice.⁶⁷ Because none of the witnesses saw the actual performance by the plaintiff of the process in question, the testimony of these witnesses did not corroborate the plaintiff's statements of reduction to practice,⁶⁸ and his unsupported claim was insufficient to establish the fact.⁶⁹ The Court of Customs and Patent Appeals used the language of the *Petrie* decision in *Kear v. Roder*,⁷⁰ in which the appellant attempted to prove reduction to practice by way of third-party testimony and references to documentation from the relevant time period.⁷¹ The documentation included the appellant's notebook and time cards.⁷² The court characterized this documentation as "self-serving declarations," and, thus, insufficient as corroboration.⁷³

A few years later, the same court restated the ruling of *Kear* in *Thurston v. Wulff*.⁷⁴ In this case, the Board found the deposition testimony of a witness called by plaintiff to be inadequate with respect to identification of a newly-synthesized compound; therefore, it was insufficient to establish a reduction to practice of the subject of the patent.⁷⁵ Before the appeals court, the plaintiff argued that in a large well-conducted laboratory, where well-kept

63. *Mergenthaler*, 11 App. D.C. at 278.

64. See, e.g., *Berry v. Webb*, 412 F.2d 261, 267 (C.C.P.A. 1969) (basing a split award of priority in an interference proceeding partially on the basis for the corroboration requirement).

65. 19 App. D.C. 386 (D.C.Cir. 1902).

66. *Petrie*, 19 App. D.C. at 389.

67. *Id.* at 388-89.

68. The witnesses' "knowledge" was based upon what *Petrie* had said, not what the witnesses observed or independently knew; thus, the reliability of their testimony was inadequate. *Id.*

69. *Id.*

70. 115 F.2d 810 (C.C.P.A. 1940).

71. *Kear*, 115 F.2d at 818.

72. *Id.* at 813.

73. *Id.* at 817.

74. 164 F.2d 612 (C.C.P.A. 1947).

75. *Thurston*, 164 F.2d at 614-15.

books and records are maintained, there is little opportunity for fraud to be perpetrated, and, thus, little likelihood that the inventor's testimony and records would involve perjury.⁷⁶ Therefore, it was argued, the plaintiff's testimony required no corroboration.⁷⁷ The court refused to eliminate the corroboration requirement and stated that corroborating evidence could not consist of "self-serving documents prepared by him or under his direction," and could also not be based upon information received from the inventor.⁷⁸

Between *Petrie* and *Thurston*, there occurred a progression from a rejection, as corroborating evidence, of unverifiable testimony regarding oral communications (*Petrie*) to *ab initio* denial of any weight to research notebooks (contemporaneous documents) (*Thurston*).⁷⁹ This progression transpired largely without critical inquiry and sometimes resulted in a mechanical approach to determining the credibility of proffered corroboration.⁸⁰

Analysis of corroboration entails a rational evaluation of all evidence concerning the inventor's claims.⁸¹ More recently, the Court of Appeals for the Federal Circuit and its predecessor court, the Court of Customs and Patent Appeals, have employed a "rule of reason" to ease the requirement of corroboration of the testimony of the inventor.⁸² This "rule of reason" is inconsistent with the mechanical disposition of the evidentiary issue presented by the notebook in *Thurston*.⁸³ The goal of corroboration is to prove by evidence not subject to falsification or fabrication that the inventor reduced the invention to practice.⁸⁴

In *Berry v. Webb*,⁸⁵ the Board rejected the plaintiff's patent claim as uncorroborated because the evidence offered as corroboration was the plaintiff's research notebook.⁸⁶ The court rejected the Board's decision and reasoned somewhat differently than prior holdings.⁸⁷ Keeping the purpose of the corroboration rule in mind

76. *Id.* at 617.

77. *Id.*

78. *Id.*

79. *Reese v. Hurst*, 661 F.2d 1222, 1240 (C.C.P.A. 1981) (Baldwin, J., concurring) (analyzing the history and purpose of the corroboration requirement with respect to the rule of reason).

80. *Reese*, 661 F.2d at 1240.

81. *Id.* at 1225.

82. *Id.* See notes 32 and 33 and accompanying text.

83. *Reese*, 661 F.2d at 1240 (Baldwin, J., concurring).

84. *Gianladis v. Kass*, 324 F.2d 322, 325 (C.C.P.A. 1963).

85. 412 F.2d 261 (C.C.P.A. 1969).

86. *Berry*, 412 F.2d at 266.

87. *Reese*, 661 F.2d at 1241 (Baldwin, J., concurring).

(to prevent fraud), the court looked at all of the facts of the appeal.⁸⁸ The research notebook was a contemporaneous record of an organized research effort.⁸⁹ It would not have been reasonable to imagine that the plaintiff had in mind the present interference action when he was recording the experiments.⁹⁰ Plaintiff's laboratory partner also testified to having observed the experiments, understood the results, and witnessed the maintenance of the notebook.⁹¹ This established the existence and maintenance of the notebook; the court held that to require more corroboration would not serve to further dispel the chance of fraud.⁹²

The analysis of the *Berry* court took two significant departures from previous reasoning.⁹³ First, the court lessened the weight given to any potential motivation of the appellant to distort the results of experiments recorded years before the present controversy.⁹⁴ Second, the certification at the time of the recording in the notebook (by a separate signature in the notebook) by the witness who understood the results was seen as reliable corroboration of the authenticity (not the accuracy) of the notebook and its contents.⁹⁵ Similar application of the rule of reason, evaluating the surrounding circumstances to determine reliability of the proffered corroboration, can be seen in other decisions of the time.⁹⁶

Use of this "rule of reason," however, has not eliminated the requirement that evidence supporting the inventor's testimony may not depend solely on the inventor.⁹⁷ This rule is not to be used to eliminate requirements of the law; it is only to be used to determine the evidence necessary for corroboration of the interfering inventor's testimony.⁹⁸

By holding that an inventor provoking an interference need only

88. *Reese*, 661 F.2d at 1241.

89. *Berry*, 412 F.2d at 267.

90. *Id.*

91. *Id.*

92. *Id.*

93. *Reese*, 661 F.2d at 1241 (Baldwin, J., concurring).

94. *Id.*

95. *Id.* An unwitnessed laboratory notebook was not considered adequate corroborating evidence in *Gortatowsky v. Anwar*, 442 F.2d 970 (C.C.P.A. 1971).

96. See, e.g., *Ritter v. Rohm & Haas Co.*, 271 F. Supp. 313 (S.D.N.Y. 1967) (upholding patent validity in an infringement action); *Cleeton v. Hewlett-Packard Co.*, 343 F.Supp. 1215 (D.Md. 1972) (holding patents invalid for obviousness in an infringement action); *Anderson v. Pieper*, 442 F.2d 982 (C.C.P.A. 1971) (awarding patent to junior party in an interference action). See note 33 which discusses some of the factors that are relevant to determining the inventor's credibility.

97. *Reese*, 661 F.2d at 1230.

98. *Id.* at 1230-31.

present evidence to meet the "clear and convincing" standard of proof, and interpreting the "rule of reason" to allow corroboration of a drawing by one who does not understand the subject matter in dispute, it may appear as if the court in the instant action is loosening the standards by which one will prevail in an interference action. The court, however, took this opportunity to review the law of interferences, as established by this and predecessor courts, in light of the more recent holdings of the Supreme Court.⁹⁹ The Court of Appeals for the Federal Circuit did its job by reconciling what appeared to be conflicting law regarding patent interference issues as handed down by diverse courts.¹⁰⁰

Ironically, the Court of Appeals for the Federal Circuit may have resolved the issue of the burden of proof and corroboration of the inventor's testimony in a patent interference case just in time to see the patent interference system, as presently administered, disappear in the United States. The patent interference process stems from the concept that the patent should be issued to the first to invent.¹⁰¹ The United States and the Philippines are the only countries that use the first-to-invent system.¹⁰² The rest of the world uses a first-to-file system.¹⁰³ In a first-to-file system, the inventor who first files a patent application is entitled to the patent, regardless of who first invented the subject matter.¹⁰⁴ Under this type of system, an interference proceeding to determine who is entitled to the patent is generally unnecessary.¹⁰⁵ The difficulties in obtaining and enforcing international patents with the existing divergent patent laws has led to an effort to harmonize the world's patent laws. The United States is considering adopting the first-to-file system as part of an international patent harmonization treaty.¹⁰⁶

The World Intellectual Property Organization ("WIPO") has

99. The Court clarified the standards of proof and their application. See note 11 and accompanying text.

100. See note 10.

101. See notes 3, 5, 6, and 7.

102. Bernard R. Pravel, *Why the United States Should Adopt the First-to-File System for Patents*, 22 ST. MARY'S L.J. 797, 797 (1991) (advocating adoption of a first-to-file patent system in the United States).

103. Pravel, cited at note 102, at 797.

104. *Id.* The application could be filed either in the domicile country patent office or in a foreign patent office with reciprocal priority provisions. *Id.* It is possible that derivation cases could continue to award a patent to the first to invent. See notes 129 and 130 and accompanying text.

105. *Id.* at 800.

106. *Id.* at 801.

been meeting periodically since 1984 to establish a multilateral agreement on an international patent law treaty.¹⁰⁷ Other efforts at worldwide patent harmonization have been taking shape during the negotiations of the General Agreement on Tariffs and Trade ("GATT").¹⁰⁸ These negotiations through the international channels have been going on for years without much success. The United States, through the United States Trade Representative office, has been forging bilateral agreements with individual nations regarding protection of patent rights.¹⁰⁹ There are also bills before Congress that would implement, inter alia, the first-to-file patent system in the United States.¹¹⁰

There are advantages and proponents for both first-to-file and for first-to-invent systems. One advantage often cited by first-to-file proponents is that it would minimize delays in the administration of the patent issuance process.¹¹¹ Another advantage to inventors and the public is the elimination of interferences to determine who first invented the subject matter.¹¹² Adoption of the first-to-file system would also bring the patent laws of the United States more in line with those of other countries. The National Association of Manufacturers, the Intellectual Property Organization, which represents large corporate patent holders, and an association of patent attorneys all support adoption of the first-to-file

107. W. John Moore, *Reinventing Patents*, NAT'L L. J., March 20, 1993, at 694.

108. Alan S. Gutterman, *The North-South Debate Regarding the Protection of Intellectual Property Rights*, 28 WAKE FOREST L. REV. 89, 104-11 (1993) (discussing United States and foreign perceptions of intellectual property rights).

109. Gutterman, cited at note 108, at 111-17 (1993). For example, the North American Free Trade Agreement between the United States, Canada, and Mexico contains some provisions on protection of patent rights among the three countries.

110. Representative William J. Hughes, D-NJ, introduced H.R. 4978, 102nd Cong., 2d Sess. (1992) that, inter alia, would implement a first-to-file patent system. On the same day (April 9, 1992), Senator Dennis DeConcini, D-AZ, introduced a similar bill, S. 2605, 102nd Cong., 2d Sess. (1992), in the Senate. No action was taken on these bills in the 102nd Congress. *Conferences: First-to-File System Does Not Get Approval of ABA House of Delegates*, 45 PAT., TRADEMARK & COPYRIGHT J. 323 (1993). Senator DeConcini said that the "drastic" changes introduced by his bill, and by harmonization in general, could lead to the most significant changes in United States patent law since 1836. *Legislation: Patent System Harmonization Bills Are Introduced in House and Senate*, 43 PAT., TRADEMARK & COPYRIGHT J. 519-20 (1992).

111. Pravel, cited at note 102, at 805. Applications are often prolonged by the Patent Office awaiting the resolution of challenges by the Board or by the courts. The first-to-file system would eliminate many, if not all, of these delays because there is no issue to resolve regarding who was the first to invent the subject. *Id.*

112. Pravel, cited at note 102, at 805. Patent interferences cost the patent office \$1 million and applicants \$15 million each year. Moore, cited at note 107, at 694.

system.¹¹³

Proponents of the first-to-invent system, led by independent inventors, university researchers, and a minority of patent attorneys,¹¹⁴ maintain that adoption of the first-to-file system would threaten the independent inventor and would result in simply a race to the patent office.¹¹⁵ With an average patent application costing \$3,750,¹¹⁶ an independent inventor may not be able to win the "race" to the patent office to file the application. With the first-to-invent system, the inventor need not worry about preemption, as long as *the inventor* was the first to invent and was diligent about reducing the invention to practice.¹¹⁷ The inventor can afford to wait for further development and, possibly, to attract a source of funding before filing the application.¹¹⁸ Others question the constitutionality of abolishing the first-to-invent system.¹¹⁹

Many argue that the United States is currently operating under a de facto first-to-file system. Fewer than one-half of one percent of patent applications ever go to an interference, and most of those (about 70%) do not proceed to a final decision.¹²⁰ In those that do go to an interference, it is the junior party who bears the burden of proof of priority of derivation.¹²¹ To avoid bearing that burden, it behooves the inventor to be the first to file. A study of challenged patent applications has shown that 75% of first-filers were also found to be first inventors.¹²² Because other countries operate under a first-to-file system, applications from United States com-

113. Skip Kaltenheuser, *Keep 'First to File' Patent Rule Pending*, CHRISTIAN SCI. MONITOR, June 7, 1993, at 19.

114. Kaltenheuser, cited at note 113, at 19.

115. Moore, cited at note 107, at 694.

116. *Id.*

117. See discussion at notes 5 and 6.

118. Ned L. Conley, *First-to-Invent: A Superior System for the United States*, 22 ST. MARY'S L.J. 779, 783 (1991).

119. Conley, cited at note 118, at 779; Kaltenheuser, cited at note 113, at 19. "The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries . . ." U.S. CONST. art. I, §8, cl.8.

120. Conley, cited at note 118, at 790.

121. See note 26 and accompanying text.

122. Moore, cited at note 107, at 694. Only one-half of one percent of all patent applications go to interferences and about 30% of those go to final decision. See note 120 and accompanying text. Since 75% of those that go to final decision are awarded to the senior party, i.e., the first to file, then only about 0.0375% of all patent applications are subsequently awarded to a junior party challenger. There are about 100,000 applications per year. Conley, cited at note 118, at 790. This means that there are only about 35-40 cases each year in which a patent is awarded to the junior party.

panies that operate internationally, and applications from foreign entities, are filed as soon as possible to comply with the foreign systems.¹²³ It is thus argued that adoption of first-to-file would not really impact the system, because so many are operating under a de facto first-to-file system.¹²⁴ It is also argued that to maintain the first-to-invent system to benefit so few¹²⁵ at so much cost¹²⁶ is not worth the trouble.¹²⁷

Despite the opposition to the first-to-file system, there appears to be sufficient support to make it a reality within the next five or six years.¹²⁸ Even with implementation of the first-to-file system, not all disputes currently associated with interferences will disappear. Actions to resolve derivation (theft) and conflicting priority dates regarding applications would still be necessary.¹²⁹

Although the number of interferences would significantly decrease, it would still be necessary to retain the interference system to deal with these issues.¹³⁰ Unless the adoption of a first-to-file system dramatically changes the way in which remaining interferences are handled, the Court of Appeals for the Federal Circuit's decision in *Price v. Symsek*, regarding corroboration and burden of proof, sets precedent for determining interference cases until the

123. In fact, almost 50% of all patent applications in this country are filed by foreigners. Charles L. Gholz, *How the United States Currently Handles the Interference Issues That Will Remain in a First-to-File World*, 18 AM. INTELL. PROP. L. ASS'N Q.J. 1, 9 (1990) (discussing the various interference issues that will not be eliminated by a first-to-file system).

124. Conley, cited at note 118, at 792. A converse argument is that because those who primarily support first-to-file already operate in that manner, why change the system to force everyone to do so? *Id.*

125. See note 122.

126. See note 112.

127. Moore, cited at note 107, at 694.

128. *Global Intellectual Property Law is Dampening Piracy*, CORP. LEGAL TIMES, June 1993, at 37, 43 (quoting Edward H. Gorman, Jr. from a roundtable discussion at the John Marshall Law School as part of the 37th Annual Conference on Developments in Intellectual Property Law).

129. Gholz, cited at note 123, at 9. There are two types of derivation cases—one which is outright theft, and one which is a result of some cooperation between companies or inventors and one or more inventors claiming that the other(s) derived the invention. This second type is the variety of derivation claim in *Price v. Symsek*. There are some other rare scenarios that could also occur that would today result in a derivation interference that would need a vehicle for resolution under any future patent system. *Id.* With different countries using different filing dates, with various addenda being filed to update original filings, and with earlier publication under the first-to-file than under the current system, the determination of exactly which application was first filed may be a fairly common occurrence. *Id.* at 9, 11, 13. This, too, would require a vehicle of resolution under any future system.

130. *Id.* at 2, 17.

international harmonization of patent laws, and for resolution of remaining interference-type questions beyond that.

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